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SEP 0 9 2008

PATENT APPLICATION

HEWLETT-PACKARD COMPANY Intellectual Property Administration P.O. Box 272400 Fort Collins, Colorado 80527-2400

ATTORNEY DOCKET NO. \_

100<u>07972-1</u>

IN THE

UNITED STATES PATENT AND TRADEMARK OFFICE

inventor(s):

Henri Jacques Suermondt et al.

Confirmation No.: 4497

Application No.: 09/945,193

Examiner: Scott L. Jarrett

Filing Date:

08-31-2001

Group Art Unit: 3623

September 9, 2008

Telephone: (713) 468-8880, ext. 304

Date:

Title: Predicting Parts for Onsite Repair

Mail Stop Appeal Brief - Patents Commissioner For Patents PO Box 1450 Alexandria, VA 22313-1450

#### TRANSMITTAL OF REPLY BRIEF

Tran	nsmitted herewith is the Reply Brief with respect to the Ex	xaminer's Answer mailed on July 9, 2008
This	Reply Brief is being filed pursuant to 37 CFR 1.193(b) w	vithin two months of the date of the Examiner's Answer.
	(Note: Extensions of time are not allowed under 37	CFR 1.136(a))
	(Note: Failure to file a Rephy Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new ground rejection.)	
No 1	fee is required for filing of this Reply Brief.	
if ar	ny fees are required please charge Deposit Account 08-2	2025.
	I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mall in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450	Respectfully submitted, Henri Jacques Suermondt et al.
	Date of Deposit:	Ву
	OR	Ginger Yount
X	I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number (571) 273-8300.	Attorney/Agent for Applicant(s)  Reg No.: 40,025

Rev 10/07 (ReplyBrf)

Typed Name:

Date of facsimile: September 9, 2008

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HEWLETT-PACKARD COMPANY Intellectual Property Administration SFP 0 9 2008

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P.O. Box 272400 Fort Collins, Colorado 80527-2400

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Typed Name:

Ginger Yount

Respectfully submitted,

Henri Jacques Suermondt et al.

Attorney/Agent for Applicant(s)

Reg No. :

40,025

Date:

Ву

September 9, 2008

Telephone: (713) 468-8880, ext. 304

Rev 10/07 (ReptyBrt)

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### SEP 0 9 2008

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Henri Jacques Suermondt et al. §

Art Unit:

3623

Serial No.:

09/945,193

§ I

§

Examiner:

Scott L. Jarrett

Filed:

August 31, 2001

§ 8

For:

Predicting Parts for Onsite

Atty. Dkt. No.:

10007972-1

Repair

§

(HPC.0415US)

## Mail Stop Appeal Brief-Patents

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## REPLY BRIEF

Sir:

In the Examiner's Answer dated July 9, 2008, a new ground of rejection was raised: rejection of claims 29, 30, 34, 36-42, and 55-60 under 35 U.S.C. § 101. See Examiner's Answer at 3.

Appellant requests that the appeal be maintained, and arguments against the new ground of rejection are set forth below.

### I. NEW GROUND OF REJECTION UNDER 35 U.S.C. § 101

Claims 29, 30, 34, 36-42, and 55-60 were rejected under 35 U.S.C. § 101 as not being directed to statutory subject matter. Appellant respectfully disagrees with the assertion by the Examiner. The Examiner argued that the process steps of the above claims "are not tied to another statutory class nor do they execute a transformation." *Id*.

Date of Deposit September 9,200

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Ginger Yount

First, it is respectfully submitted that the above claims specifically recite a statutory class, namely a method of performing various tasks. Thus, the statement that the process of the above claims is not directed to a statutory class is clearly erroneous.

A second point of error made by the Examiner is the requirement that the process steps must "execute a transformation." That is not the correct standard for determining whether or not a claim recites statutory subject matter.

There are three categories of subject matter that are unpatentable: laws of nature, natural phenomena, and abstract ideas. State Street Bank & Trust Company v Signature Financial Group, Inc., 149 F.3d 1368, 1373, 47 U.S.P.Q.2d 1596 (Fed. Cir. 1998). As further explained by State Street Bank,

Unpatentable mathematical algorithms are identifiable by showing they are merely abstract ideas constituting disembodied concepts or truths that are not "useful." From a practical standpoint, this means that to be patentable an algorithm must be applied in a "useful" way. *Id.* (emphasis added).

The court further held that "the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'a useful, concrete and tangible result' – a final share price momentarily fixed for recording and reporting purposes and even accepted and relied upon by regulatory authorities and in subsequent trades." *Id.* Similarly, in *AT&T Corp. v. Excel Communications Inc.*, 172 F.3d 1352, 50 U.S.P.Q.2d 1447 (Fed. Cir. 1999), the court held that a method claim relating to using a Boolean algorithm to determine the value of a PIC indicator is directed to statutory subject matter, because the PIC indicator represents information about a call recipient's PIC, which the court said was a useful, non-abstract result. 172 F.3d at 1358.

In the present independent claim 42, a method executed by a computer comprises determining costs of mis-predicting parts that may be replaced during an on-site repair of a product in response to a repair history, where the costs are computed based on probabilities of over-predicting and under-predicting the parts; selecting a subset of the parts to be sent to the on-site repair in response to the costs; and determining which personnel to target for additional training in response to the costs. Similar to the subject matter of the claims at issue in State Street Bank and AT&T, the subject matter of claim 42 clearly produces a useful, concrete, and tangible result. Therefore, claim 42 is clearly directed to statutory subject matter.

Independent claims 38 and 58 similarly recite subject matter that produces a useful, concrete, and tangible result.

The Examiner argued that the preamble language "executed by a computer" can be ignored for the purpose of rendering the § 101 rejection. As stated by the Examiner, "the recitation of a computer in the preamble is not, in fact, a limitation at all to the scope of the claim, and the claim is directed, in essence, to the method performed by any means." Examiner's Answer at 5. Ignoring the language in the preamble of claim 42 is clearly erroneous. The preamble of claim 42 specifically recites that the method is executed by a computer, which would foreclose the method of claim 42 being performed mentally by a human. The "executed by a computer" language is not merely a field of use limitation that can be ignored. In fact, the "executed by a computer" language specifically defines that the method of claim 42 has to be performed by a computer.

Therefore, the Examiner's § 101 rejection that is based on ignoring claim language is clearly erroneous.

Moreover, the Examiner further argued that the language "a method executed by a computer" "is so generic as to encompass any computing system, such that any one who performed this method in practice would fall within the scope of these claims." *Id.* It appears that the Examiner is arguing that a human being can be a computer. That interpretation is clearly erroneous.

In view of the foregoing, it is clear that the above claims are directed to statutory subject matter.

Therefore, reversal of the § 101 rejection of the above claims is respectfully requested.

## II. REPLY TO EXAMINER'S ANSWER REGARDING THE REJECTION OF CLAIMS OVER P&F AND PATTON

In the Response to Arguments section of the Examiner's Answer, the Examiner again referred to the first call fix rate (FCFR) parameter mentioned in P&F (at pages 58-59) and Patton (page 48). As explained on page 58 of P&F, the first call fix rate (FCFR) parameter is equal to the quality satisfied at first attempt divided by the total requests. The FCFR parameter therefore clearly does not constitute either of the following elements recited in the claimed invention:

(1) a number of trips that the set of symptoms were reported, the subgroup of parts were sent, and at least one part not in the subgroup of parts was needed to complete the on-site repair, or (2) a number of trips that a set of symptoms were reported, the subgroup of parts were sent, and the subgroup of parts included at least one part that was unnecessary in the on-site repair.

All the FCFR parameter of P&F or Patton discloses is a percentage value that indicates the quality satisfied at the first attempt, divided by the total requests. The same definition of the FCFR parameter is provided by Patton.

The Examiner also referred to Fig. 16-1 of P&F, which depicts product uptime. With respect to Fig. 16-1, the Examiner referred specifically to callback percentages and callback time. As explained by the Examiner, callback percentages is a "direct measure of the number of times (percentage of calls) made before a repair request is resolved (completed)." This parameter of P&F bears no resemblance to the two "number of trips" elements of the claimed invention mentioned above.

With respect to the "callback time" mentioned in P&F, the Examiner stated that this parameter refers to the "time between calls/trips." *Id.* at 44. Again, this parameter has nothing to do with the "number of trips" elements of the claimed invention mentioned above.

The Examiner also referred to "callbacks" mentioned on page 50 of Patton. As explained by Patton, "the number of callbacks provides an evaluation of the technical capability of the service personnel. A callback represents a service call caused by the inadequacy of an original service visit." Patton, p. 50. This callback parameter also has nothing to do with the "number of trips" elements of the claimed invention.

In view of the foregoing, and in view of the arguments presented in the Appeal Brief, reversal of the final rejection of the claims over P&F and Patton is respectfully requested.

# III. REPLY TO EXAMINER'S ANSWER REGARDING CLAIMS 38 AND 42 AS BEING ANTICIPATED BY P&F

Claim 38 recites a method that comprises:

- determining costs of mis-predicting parts that may be replaced during an
  onsite repair of a product in response to a repair history, wherein the costs
  are computed based on probabilities of over-predicting and underpredicting the parts;
- selecting a subset of the parts to be sent to the onsite repair in response to the costs; and

> selecting another subset of the parts for training of call qualifiers in response to the costs.

As purportedly disclosing the last clause of claim 38, "selecting another subset of the parts for training of call qualifiers in response to the costs," the Examiner cited pages 45 and 46 of P&F. Examiner's Answer at 47. Specifically, the Examiner cited the following quote:

The differences between what parts are provided, and what parts are really needed can guide improvements in diagnostics, training, and discipline toward fewer parts and lower costs.

Id.

The "costs" mentioned in this cited passage of P&F is completely different from the "costs" recited in claim 38. Note that the costs of claim 38 refers to costs of mis-predicting parts that may be replaced during an on-site repair of a product in response to a repair history, and where the costs are computed based on probabilities of over-predicting and under-predicting the parts. The cited passage of P&F refers generally to lowering costs based on improvements in training. There is absolutely no mention or hint in P&F of selecting another subset of parts for training of call qualifiers in response to costs that are computed based on probabilities of over-predicting and under-predicting parts.

The Examiner also cited pages 443 and 444 of P&F. On page 443, the Examiner cited to the statement in P&F that nine out of every ten parts that were expensively expedited to the field were not really needed, and that it was felt that in most cases that the extra parts were ordered because poor diagnostics failed to proactively determine the one or few parts that were probably needed to fix the failure. The passage on page 444 of P&F cited by the Examiner refers to an opportunity for improved support engineering in field operations. Neither of these passages of P&F provides any teaching of selecting another subset of the parts for training of call qualifiers

in response to the costs that are computed based on probabilities of over-predicting and under-predicting parts that may be replaced during an on-site repair of a product.

The Examiner further cited to page 39 of P&F, which refers to the need to train people. Moreover, the Examiner cited to page 395 of P&F, which refers to formal training for qualified parts personnel. In addition, the Examiner cited page 396 of P&F, which refers to training as only a means to the end result of better performance.

None of the passages above provide any hint of selecting another subset of the parts for training of call qualifiers in response to the costs that are computed based on probabilities of over-predicting and under-predicting the parts.

The Examiner also improperly referred to Patton in the context of a § 102 rejection of the claims over P&F. Examiner's Answer at 48. Citing a second reference that was not part of the § 102 rejection is clearly improper. In any event, the cited passages of Patton provide absolutely no teaching whatsoever of the "selecting another subset of the parts" clause of claim 38.

Independent claim 42 is similarly allowable over P&F, since P&F fails to disclose "determining which personnel to target for additional training in response to the costs" that are computed based on probabilities of over-predicting and under-predicting the parts that may be replaced during an on-site repair.

Therefore, reversal of the final rejection of the above claims is respectfully requested.

#### IV. CONCLUSION

In view of the foregoing, and in view of the arguments presented in the Appeal Brief, reversal of all final rejections is respectfully requested.

Respectfully submitted,

9-9-2008

Dan C. Hu

Registration No. 40,025

TROP, PRUNER & HU, P.C.

1616 South Voss Road, Suite 750

Houston, TX 77057-2631

Telephone: (713) 468-8880 Facsimile: (713) 468-8883